

ABSTRACT OF THE DISCLOSURE

The invention concerns an illumination system, particularly for microlithography with wavelengths ≤ 193 nm, comprising a light source, a first optical component, a second optical component, an image plane and an exit pupil. The first optical

5 component transforms the light source into a plurality of secondary light sources being imaged by the second optical component in said exit pupil. The first optical component comprises a first optical element having a plurality of first raster

10 elements, which are imaged into said image plane producing a plurality of images being superimposed at least partially on a field in said image plane. The first raster elements deflect incoming ray bundles with first deflection angles, wherein at least

15 two of the first deflection angles are different. The first raster elements are preferably rectangular, wherein the field is a segment of an annulus. To transform the rectangular images of the first raster elements into the segment of the annulus, the second optical component comprises a first field mirror for shaping the field to the segment of the annulus.